

WHAT IS CLAIMED IS:

1. A method comprising the steps of:
receiving an encrypted data from a first plurality of applications including a first
5 encrypted data from a first application assigned to a first key register and a
second encrypted data from a second application assigned to a second key
register;
assigning a third key register for decrypting data from the first application, based
upon a request for re-authentication;
10 receiving a third encrypted data from the first application assigned to a third key
register; and
providing the first encrypted data to a first decryption source after the step of
receiving the third encrypted data.
- 15 2. The method as in Claim 1, further including the steps of:
providing the third encrypted data to the first decryption source; and
providing the second encrypted data to the second decryption source.
- 20 3. The method as in Claim 1, wherein the decryption source decrypts the first
encrypted data using a first encryption key stored in the first key register.
4. The method as in Claim 1, wherein the request for re-authentication is a
notification sent by the first application to a driver.
- 25 5. The method as in Claim 1, wherein the step of assigning the third key register
includes locating an unused key register.
6. A method of providing multiple channels of secure multimedia data, the method
comprising the steps of:
30 receiving a first authentication request from a first multimedia application;

receiving a second authentication request from a second multimedia application,
wherein the second multimedia application is different than the first
multimedia application;
assigning a first key register to the first application based upon the first
5 authentication; and
assigning a second key register to the second application based upon the second
authentication,
receiving first encrypted data based upon a first encryption key from the first
multimedia application;
10 receiving second encrypted data based upon a second encryption key from the
second multimedia application, wherein the first and second encrypted data
are for simultaneous real-time play back.

7. The method as in Claim 6, wherein the first and second application are the same
15 application.

8. The method as in Claim 6, wherein the first and the second applications are capable
of providing a notification to the driver.

9. The method as in Claim 8, wherein the notification includes the first and second
20 authentication request.

10. The method as in Claim 8, wherein the notification includes a request for re-
authentication.
25

11. The method as in Claim 6, wherein the first and the second multimedia applications
relate to video applications.

12. The method as in Claim 6, wherein assigning the first and the second encryption
30 key includes selecting unused key registers.

13. The method as in Claim 6, wherein the first and second key registers are stored in a driver.

14. The method as in Claim 6, wherein the first and second key registers are stored in hardware.

15. The method as in Claim 6, further including the step of providing a binary file to developers of the first and second multimedia applications for inclusion in the first and second multimedia application.

16. The method as in Claim 15, wherein the binary file is for decoding commands generated in the first and second multimedia applications to hardware commands.

17. The method as in Claim 15, wherein the binary file includes a set of encryption keys for encrypting data generated in the first and second applications.

18. A system comprising:
a data processor having a first I/O buffer;
a memory having a second I/O buffer coupled to the first I/O buffer of the data
processor, the memory capable of storing code for:
5 a plurality of multimedia applications including a first multimedia
application and a second multimedia application, wherein the second
multimedia application is different from the first multimedia
application;
a driver for:
10 receiving a first authentication request from the first multimedia
application;
receiving a second authentication request from the second
multimedia application;
15 assigning a first key register to the first application based upon the
first authentication; and
assigning a second key register to the second application based upon
the second authentication,
20 receiving first encrypted data based upon a first encryption key from
the first multimedia application; and
receiving second encrypted data based upon a second encryption key
from the second multimedia application, wherein the first
and second encrypted data are for simultaneous real-time
play back; and
a hardware device for processing data generated by the first and second multimedia
25 applications including;
a key register for storing a decryption key;
a decryption component for decrypting data using said decryption key; and
a processing component for processing multimedia data.

19. The method as in Claim 18, wherein the plurality of multimedia applications

include a binary file for encrypting data generated within the plurality of multimedia applications.

20. The method as in Claim 19, wherein the binary file is further capable of decoding data generated within the plurality of multimedia applications to generate hardware commands.

21. The method as in Claim 18, wherein the driver is further capable of:
decrypting the first encrypted data based on the first encryption key;
decrypting the second encrypted data based on the second encryption key;
encrypting the first and second encrypted data using a hardware key to generate a third encrypted data; and
providing the third encrypted data to the hardware device.

22. The method as in Claim 18, wherein the hardware device includes sets of key registers for storing a plurality of decryption keys and the hardware device is further capable of:
decrypting the first encrypted data based on the first encryption key; and
decrypting the second encrypted data based on the second encryption key.

23. A computer readable medium tangibly embodying a plurality of programs of instructions, the plurality of programs including:

a driver for:

receiving a first authentication request from the first multimedia application;

receiving a second authentication request from the second multimedia application;

assigning a first key register to the first application based upon the first authentication;

assigning a second key register to the second application based upon the second authentication,

receiving first encrypted data based upon a first encryption key from the first multimedia application; and

receiving second encrypted data based upon a second encryption key from the second multimedia application, wherein the first and second encrypted data are for simultaneous real-time play back.

24. The computer readable medium as in Claim 22, wherein the plurality of programs further include a plurality of multimedia applications including a first multimedia application and a second multimedia application, wherein the second multimedia application is different from the first multimedia application.

25. The computer readable medium as in Claim 24, wherein the plurality of multimedia applications include a binary file for encrypting data generated within the plurality of multimedia applications.

26. The computer readable medium as in Claim 24, wherein the binary file is further capable of decoding data generated within the plurality of multimedia applications to generate hardware commands.

27. The computer readable medium as in Claim 24, wherein the driver is further capable of:

decrypting the first encrypted data based on the first encryption key; and

5 decrypting the second encrypted data based on the second encryption key.

28. A method comprising the steps of:
- providing a binary file to an application vendor, wherein the binary file is for:
- providing a method of negotiating encryption with a device driver;
 - generating an encryption key value based upon a negotiation with the device driver; and
 - providing an encryption of data using a final key value.

5